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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Gary Gao

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OWENS CORNING
2790 COLUMBUS ROAD
GRANVILLE, OH 43023

EXAMINER

HOFFMANN, JOHN M

ART UNIT

PAPER NUMBER

1791

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/730,277	Applicant(s) GAO ET AL.	
	Examiner John Hoffmann	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7, 11-14 and 28-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 11-14 and 28-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1 October 2008 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 44-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 44 refers to the front of the apparatus. Claim 45 refers to the back of the apparatus. The paragraph spanning pages 6-7 of the specification states that the side that applicator 14 contacts is the "front" and the opposite side is the rear. This is deemed to be definitions for "front" and "rear". However, it is unclear what the front and back would be if there were two applicators that contact, if the applicator contacted

Art Unit: 1791

neither, or what if the applicator did contact, but that it was not applicator 14. In other words, it is unclear one should read the language "14" (and "30") into the definitions.

Moreover, the subsequent paragraph in the specification states that 110 is a front, and 112 is the rear. But 110 is the side that does not contact the applicator 14. It is unclear whether there is an error in the application, or if it means that one can consider either side to be a front, and other side to be rear.

Thus it is unclear whether such is intended to serve as definitions, or if such should be interpreted to be examples.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 46-51 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no support for the manifold that conveys a gas and a liquid to the nozzles. First, there is no literal support. As to implicit support: whereas page 8, lines 9-16 of the specification, indicates that all of the features are "connected" together, the gas and liquid are not conveyed as claimed. It is clear that one manifold conveys one

fluid, and another manifold conveys the other fluid. Just because two things are connected, it doesn't mean that there is a conduit between the two.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7, 12, 13, and 28-38 and 52 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Bohy 40713412.

As set forth in prior Office actions: Bohy clearly has a bushing, two nozzles, and a gathering shoe. All of the limitations regarding the fluids are met because they are intended use limitations which Bohy's apparatus could utilize. See also the arguments section below.

Claims 39, 41-48, and 50-51 are rejected under 35 U.S.C. 102(b) as being anticipated by Loeffler 4168959.

See Loeffler's figure 1 and the discussion in the 7/31/2003 Office action.

Claim 41: Figure 1 clearly shows the row.

Claim 42: The use of water is an intended use; Loeffler could utilize substantially any liquid.

Claim 43: As can be seen from the drawings, Loeffler has two sets of nozzle, one on the upstream side of forming tube 15 (115), and one on the downstream side. The

Art Unit: 1791

down stream side applicator is an size applicator, and the upstream side applicators at least one atomizer nozzle. Examiner notes that applicant's embodiments are directed to downstream/upstream in a vertical direction – however, the claims are not limited to only a vertical stream. The claim reads on any sort of stream. Note As can be seen from Loeffler, the batt is sprayed by both sprayers. First at the upstream side sprayers when the batt is in its initial stages, and then by the down stream sprayers.

Claims 44-45: as discussed above, the specification at pages 6-7 disclose either side a front and other side can be the rear. It is all a matter of perspective. Like a church: The front of a church from the outside, is the back of the church on the inside. These claims are met because one can choose either side to be the front.

Claim 46: Loeffler's manifold can convey water and air to the atomizer - for example sequentially. One could flow air through it, and every so often convey a liquid so as to wash it. Claims 47-48, 50-51 are clearly met in light of the above discussions.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

Art Unit: 1791

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 40 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable

Loeffler 4168959

Claim 40 further limits claim 39 by specifying the angle. As per col. 3, lines 22-39 of Loeffler, the angle is a result-effective variable. It would have been obvious to perform routine experimentation to determine the optimal angle, based on the desired spray result.

Claim 49 is met for the same reasons.

Claims 11, 54 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bohy 40713412 as applied to claims 28, 7 and 13, and further in view of Loeffler 4168959 (and optionally in view of applicant's admission in the 26 June 2006 response).

See how the references were applied in the 1/24/2006 and 1/29/2007 Office actions and above.

Claim 53 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bohy 40713412 as applied to claims 28 and further in view of Haruch 6161778

Claim 53 requires the fluid nozzle is an atomizer nozzle. As set forth previously in the 1/24/2006 Office action, Haruch teaches and improved cooling nozzle. It would have been obvious to use the Haruch nozzle as the Bohy cooling nozzle, for the advantages Haruch teaches.

Response to Arguments

Applicant's arguments filed 1 October 2007 have been fully considered but they are not persuasive.

It is argued that Bohy does not teach an air nozzle operable to conduct the flow of air as required by each of the independent claims.

As the court stated in *In re Schreiber*:

Art Unit: 1791

A patent applicant is free to recite features of an apparatus either structurally or functionally. See *In re Swinehart*, 58 C.C.P.A. 1027, 439 F.2d 210, 212, 169 USPQ 226, 228 (CCPA 1971) ("[T]here is nothing intrinsically wrong with [defining something by what it does rather than what it is] in drafting patent claims."). Yet, choosing to define an element functionally, i.e., by what it does, carries with it a risk. As our predecessor court stated in *Swinehart*, 439 F.2d at 213, 169 USPQ at 228:

where the Patent Office has ***reason to believe*** that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

128 F.3d 1473, 1478 (Fed. Cir. 1997) (emphasis added).

The Patent Office has reason to believe that the Bohy nozzle can conduct the flow of air as claimed: namely air is a fluid that can flow through any free space/path by the creation of a pressure differential. Since Bohy discloses that liquid can flow through the nozzles, this is evidence that a free path exists in the Bohy nozzle. Thus it is reasonable to conclude that Bohy can inherently meet the functional claim limitation.

Applicant has not demonstrated that the structure taught or suggested by Bohy does not possess the claimed functional characteristic of the broadly claimed apparatus.

It is noted that none of the rejections are to be construed as necessarily a finding that the references teach using a liquid or gas, nor that such would have been obvious. Rather the relevant limitations regarding fluids are functional limitations – not structure. As such, anticipation or obviousness does not require a showing regarding the method of use. Only the structure needs to be anticipated or found obvious.

Art Unit: 1791

MPEP 2114 (in part): MANNER OF OPERATING THE DEVICE DOES NOT DIFFERENTIATE APPARATUS CLAIM FROM THE PRIOR ART

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987) (The preamble of claim 1 recited that the apparatus was "for mixing flowing developer material" and the body of the claim recited "means for mixing ..., said mixing means being stationary and completely submerged in the developer material". The claim was rejected over a reference which taught all the structural limitations of the claim for the intended use of mixing flowing developer. However, the mixer was only partially submerged in the developer material. The Board held that the amount of submersion is immaterial to the structure of the mixer and thus the claim was properly rejected.).

As to the request for Examiner to initiate an interview: The request is **denied**.

This is because 1) the requested contact, Amy Miller, does not appear to be an attorney of record, and 2) the Office generally initiates interviews only when such is deemed to advance prosecution. It might be clear from the 5-year examining history in this application, that Examiner would have requested an interview long ago had Examiner thought there was any possible proposal he could make that might advance prosecution. As to the general request for an applicant-initiated interview: such is granted. Applicant should now propose a day and time for the interview - preferably by telephone or by a request form PTOL-413A.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is (571) 272 1191. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

Art Unit: 1791

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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